NOAA Research in New York

NY-1 through 31 (Statewide)

Climate and Global Change Program

NOAA is responsible for providing climate information to the Nation in order to prepare and protect climate sensitive sectors of society and the economy. To carry out this mission, NOAA's Climate and Global Change Program conducts focused scientific research to understand and predict variations of climate. The Program is comprised of a number of research elements, each focusing on a specific aspect of climate variability. Taken together, this research contributes to improved predictions and assessments of the effects of climate variability and change on different environments over a continuum of time scales from season to season, year to year, and over the course of a decade and beyond. This research is accomplished through the strong support of the academic and private sectors, as well as NOAA and other federal laboratories. In FY 2001, NOAA's Climate and Global Change Program provided approximately $9.8 million in support of climate research in the State of New York. For more information please visit http://www.ogp.noaa.gov

NY-1 through 31 (Based in Stony Brook and Ithaca - serves entire state)

National Sea Grant College Program
New York Sea Grant Institute

The New York Sea Grant Institute, part of NOAA's National Sea Grant College Program, is a statewide network of integrated research, education, and extension services that works to promote the wise use and protection of marine and Great Lakes resources. A cooperative program of the State University of New York and Cornell University, New York Sea Grant addresses important problems and opportunities related to coastal-dependent businesses, fisheries, seafood products, coastal hazards and processes, coastal water quality, coastal habitats, and aquatic nuisance species. Topics of current research include parameters affecting bloom initiation and decay of brown tide, hard clam population dynamics, causes of lobster disease and mortality, factors affecting salmonine fisheries, control strategies for seafood and fish pathogens, cycling and effects of trace contaminants and nutrients, estrogenicity of municipal sewage outfalls, integrated fish/nori aquaculture, nonindigenous species, bathymetry of a tidal inlet, evolution of growth rate in fishes, predicting dissolved oxygen in the Hudson River, and cyanobacteria in NYS drinking waters. The public, industry and policy makers are kept informed on those issues and others such as best marina management practices, Great Lakes fisheries and industry news, the economy and ecosystem health of the Lake Champlain Basin, and the extent of coastal flooding due to sea level rise and coastal storm surges under different prediction scenarios through extension and communications (including the newsletter "*Coastlines*") efforts in the Great Lakes, Lake Champlain and marine districts. In FY 2001, New York Sea Grant projects received funding of approximately $3.3 million from the National Sea Grant College Program. For more information, see http://www.seagrant.sunysb.edu

NY-1 through 18 (Atlantic coastal waters)

National Undersea Research Program
Mid-Atlantic Bight National Undersea Research Center

The Mid-Atlantic Bight (MAB) National Undersea Research Center supports undersea research in the Mid-Atlantic Bight, a region which extends from Montauk, New York, to the Virginia/North Carolina border. MAB is administered by the Institute of Marine and Coastal Sciences at Rutgers University in New Brunswick, New Jersey. It is one of six regional centers supported by the National Undersea Research Program. The Center provides access to undersea research platforms (such as submersibles, remotely operated vehicles, undersea sensors, and SCUBA), including Long-Term Environmental Observatories. Key research includes processes governing change and stability in undersea ecosystems; distinguishing between natural and anthropogenic changes in the marine environment; characteristics of essential fish habitat; recruitment of marine organisms; and the effects of physical and environmental processes on water disposal, fisheries, nuisance algal blooms, biodiversity/habitat, hypoxia, toxic contaminants and pathogens. FY 2001 funding for MAB totaled $1.34 million. For more information please visit http://marine.rutgers.edu/nurp/mabnurc.html

NY-1, 22, 25, and 29 (East Moriches, Hudson Falls, Syracuse, and Youngstown)

Forecast Systems Laboratory
GPS Meteorological Observing Systems

NOAA's Forecast Systems Laboratory (FSL) operates a rapidly expanding network of GPS Meteorological (GPS-Met) Observing Systems to monitor the total quantity of precipitable water vapor in the atmosphere. Currently, there are 93 systems over the contiguous 48 states and Alaska, and plans are being made to extend these observations to Hawaii, Puerto Rico, the Caribbean Islands, and Central America. Water vapor is an important but under-observed component of the atmosphere that plays a major role in severe weather events and the global climate system. GPS-Met systems provide accurate water vapor measurements under all weather conditions, including thick cloud cover and precipitation, and do so at very low cost. The network is being developed by FSL in cooperation with federal, state and local government agencies, universities, and the private sector. The GPS stations provide high-accuracy surveying and navigation services for National defense, automated agriculture, safe land and marine transportation, government infrastructure management, and 911 emergency response services. Fortuitously, these systems can also be used for meteorology with the addition of surface weather sensors. GPS-Met systems located in New York include a site operated by NOAA near Syracuse, a site operated by the U.S. Department of Transportation near Hudson Falls, and two sites operated by the U.S. Coast Guard near Youngstown and East Moriches. For more information please visit http://www.gpsmet.noaa.gov/jsp/index.jsp

NY-20 (Palisades)

Climate and Global Change Program
International Research Institute for Climate Prediction

NOAA's Climate and Global Change Program provides support for the International Research Institute for Climate Prediction (IRI) which is located on the campus of Columbia University's

Lamont-Doherty Earth Observatory. The vision for the IRI is that of an innovative science institution working to accelerate the ability of societies worldwide to cope with climate fluctuations, especially those that cause devastating impacts on humans and the environment. Operating a wide network of collaborations and comprehensive programs that couple physical science research and applications research with capacity building, the IRI is a unique institution in the international development of applications of climate prediction. For more information please visit http://iri.ldeo.columbia.edu

NY-20 (Palisades)

Climate and Global Change Program
Consortium on the Oceans Role in Climate

NOAA's Climate and Global Change Program provides support for the Consortium on the Oceans Role in Climate (CORC). CORC is a partnership between NOAA, Columbia University's Lamont-Doherty Earth Observatory, and the Scripps Institution of Oceanography and includes a number of researchers from other academic institutions. CORC was founded in 1993 as an experiment in alternate ways of bringing the academic community into NOAA's investigation of climate variability and prediction. The main objective of CORC is to observe, deduce, and model climatically important variations in the global oceans. CORC seeks to understand the causes of both abrupt changes and quasi-periodic changes over periods from years to centuries and to assess their predictability. For more information please visit http://www.ogp.noaa.gov

NY-22 and 24 (Lake Champlain)

Great Lakes Environmental Research Laboratory
Hydroacoustics Systems

A scientist from the Great Lakes Environmental Research Laboratory, in collaboration with researchers from the University of Vermont, Cornell University, University of Minnesota, west Virginia University, and the Ontario Ministry of Natural Resources, is using Lake Champlain as a test site to cross-compare and to calibrate different hydroacoustics systems with applications towards fish assessments. For more information please visit http://www.glerl.noaa.gov

NY-22 and 26 (Huntington Forest and Ithaca)

Air Resources Laboratory
Atmospheric Integrated Research Monitoring Network

AIRMoN, or Atmospheric Integrated Research Monitoring Network, is an array of sampling stations designed to quantify the extent to which changes in emissions affect air quality and deposition. NOAA's Air Resources Laboratory operates both elements of the network, AIRMoN-Wet and AIRMoN-Dry. AIRMoN-Wet collects data on the deposition of pollutants that occurs with precipitation. Daily samples of precipitation are collected at ten stations throughout the country and then sent to a single central laboratory for chemical analysis. One of the AIRMoN-Wet stations is located near Ithaca. The goal of AIRMoN-Dry is to identify and understand the processes that cause the deposition of atmospheric pollutants without the presence of precipitation in order to quantify dry

deposition rates at locations where direct measurement is not possible. An AIRMoN-Dry station is located in Huntington Forest. Prime users of these data include ecologists, agriculturists, foresters, and power companies affected by Clean Air Act legislation. For more information please visit http://www.arl.noaa.gov/research/programs/airmon.html

NY-24, 25. And 27 through 31 (Lake Ontario and Lake Erie)

National Undersea Research Program
National Undersea Research Center for the Northeastern United States and Great Lakes

The National Undersea Research Center for the Northeastern United States and Great Lakes is located at the University of Connecticut, Avery Point in Groton, Connecticut. It is one of six regional centers supported by the National Undersea Research Program. The Center supports and conducts research in the waters off the northeast coast of the United States and in the Great Lakes. The center provides science and operational support (occupied submersibles, remotely operated vehicles, and mixed gas diving technologies) and funding for reviewed projects within this region. The Center supports research on the physical, chemical, and biological factors controlling the cycling and fates of organic contaminants and heavy metals at the sediment/water interface and their ultimate impacts on biological productivity. Also receiving special attention are the habitat characteristics controlling the recruitment and population dynamics of recreational and commercial species of fish. FY 2001 funding for MAB totaled $1.4 million. For more information please visit http://www.nurc.uconn.edu

NY-24, 25. And 27 through 31 (Lake Ontario and Lake Erie)

Great Lakes Environmental Research Laboratory
Environmental Research

The Great Lakes Environmental Research Laboratory (GLERL) carries out research and provides scientific products, expertise, and services required for effective management and protection of Great Lakes and coastal ecosystems. GLERL science provides for protection of life and property, economic well-being, and sustained ecosystem health. With a wide array of scientific disciplines on staff, and an ecosystem-level focus, GLERL contributes unique capabilities in support of intelligent and cost-effective Great Lakes and coastal resource management. GLERL is pursuing focused research in areas including aquatic contaminants and biogeochemistry, invasive species, ecosystem dynamics, and long-term monitoring. In a new and unique effort started in February 2001, GLERL now has a Great Lakes Sea Grant Extension Agent onsite to support and promote increased communication and cooperation among GLERL and the seven Great Lakes Sea Grant Programs in the region, including the New York Sea Grant Program. By making GLERL scientific products, services, and expertise more widely available to the extensive Great Lakes Sea Grant Network, the agent can rely on the Network's vast outreach, communications, and education infrastructure to furnish constituents with a wider information base. For more information please visit http://www.glerl.noaa.gov

For further information about these and other NOAA programs, please contact NOAA's Office of Legislative Affairs at (202) 482-4981.

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